

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

As a preliminary matter, the Response to a non-final Office Action filed by Applicants on February 1, 2006, made no claim amendments. The subsequent Official Action made new rejections based on a newly cited reference and was made final. It is believed that the finality of that Official Action is improper and should be treated instead as a non-final Official Action. Should the Examiner not agree, Applicants request that their representative be telephoned at the number indicated below to discuss the matter.

Claims 1-16 are pending in this application, with Claims 1, 6, 7 and 12 being independent.

Examiner Lett is again thanked for indicating that Claim 6 is allowable.

Claims 1-5 and 7-16 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,021,892 to Kita et al., hereinafter *Kita*.

The Background of the Invention section of the present application describes the transfer of image data between a computer and a digital copying machine. Page 2 of the present application states that in a conventional device, sending scanned image data from the scanner to the computer and sending print image data to the printing unit from the external computer may not be carried out simultaneously through a single bus. Essentially, data can only travel one way at a time through the bus. That is a problem because either the two types of data must take turns or two busses must be used. Both options are undesirable.

Accordingly, page 10, line 15 of the present application describes an embodiment of the present invention, where the transfer of data along a bus is dependent on a scan enable signal and a print enable signal. That is, the scan enable signal allows data to travel from a copy machine to a computer, and the print enable signal allows data to travel from the computer to the copier. The scan enable signal and print enable signal are based on a clock signal, as shown in Fig. 2. As the phases are offset by half, *i.e.*, 180 degrees, one or the other is active at any time. The scan image data and the print image data are alternately transferred on a pixel by pixel basis through the bus, based on the cycle of the clock signal. The purpose is to allow a single bus to alternately transfer data from a print machine to a host computer and from a host computer to the print machine, thereby achieving substantially "simultaneous" transfer.

Claim 1 broadly encompasses that subject matter and is directed to a digital image copying machine. An image reader reads an image of an original document and generates image data. A printing unit prints based on image data. A bus transmits the image data generated by the image reader to an external computer and transmits image data from the external computer to the printing unit. A signal generator generates a signal based on an operation timing of the printing unit. A switching means, in response to the signal, switches the bus between transmission from the image reader to the external computer and transmission from the external computer to the printing unit.

Kita discloses a multi-function image processing device (MFP) which includes various functions that are described from the end of column 6 to the middle of column 7 in *Kita*. Figure 3 in *Kita* shows an MFP 1 that includes an image scanner 2

for reading a document, an image printer 3 for recording information, a facsimile control unit 4, and a personal computer 8 that is connected to the MFP 1 via a cable 7 connected to a bidirectional interface unit 5 in the MFP 1. *Kita* discloses that there are two operation modes: an on-line mode and an off-line mode. When the MFP 1 is in the off-line mode, the MFP 1 is operated independently from the data processing device as an external device connected thereto through the interface unit and COPY and FACSIMILE functions are performed (column 2, lines 24-41). When the MFP 1 is in an on-line mode, IMAGE INPUT, IMAGE PRINT, and FACSIMILE are executed according to control commands provided to the MFP 1 by the personal computer 8 connected to the MFP 1 (column 2, lines 42-59).

Claim 1 is allowable at least because it recites in part: a signal generator that generates a signal based on an operating timing of a printing unit. That subject matter enables the intended operation of the device defined by Claim 1, *i.e.*, the substantially simultaneous transmission of image data from an image reader to an external computer and vice versa.

in contrast to Claim 1, *Kita* does not disclose the claimed signal generator that generates a signal based on an operating timing of a printing unit. That difference is evidenced by the fact that *Kita* is not related to substantially simultaneous transfer of image data from an image reader to an external computer and vice versa. The Official Action directs attention to column 4, lines 46-59 in *Kita* for a disclosure of that subject matter, but that portion of *Kita* does not disclose or relate to operating timing of a printing unit. That portion of *Kita* recites:

"FIG. 3 is a block diagram of a device 1 having the personal computer 8 being connected thereto. Reference numeral 50 designates a main CPU as the main control unit for controlling

the device 1 in accordance with each of the system programs stored in a read-only memory (ROM) 51 in advance."

Applicants do not understand how that portion of *Kita*, or any other portion for that matter, relate to or disclose the subject matter in Claim 1 relating to a signal generator that generates a signal based on an operating timing of a printing unit. Should the rejection be maintained, it is respectfully requested that it be explained more specifically how *Kita*, and particularly the identified section of *Kita*, discloses that subject matter.

Claim 1 is also allowable because it recites in part: a switching means that, in response to the signal, switches a bus between transmission from an image reader to an external computer and transmission from the external computer to a printing unit. For a disclosure of that subject matter, the Official Action identifies column 6, line 67-column 7, line 7. However, that portion of *Kita* describe the IMAGE INPUT function and the IMAGE PRINT function in the on-line mode. It appears that the image data is perhaps transferred from the image scanner 2 to the personal computer 8, and from the personal computer 8 to the image printer 3, via a common data bus, but there is no indication that the transfer is done in the same manner as claimed. That is, there is no indication that *Kita* discloses a switching means that, in response to a signal based on operating timing of a printing unit, switches a bus between transmission from an image reader to an external computer and transmission from an external computer to a printing unit.

Claims 7 and 12 are allowable for similar reason as those set forth above with regard to similar language in Claim 1.

Claims 2-5, 8-11 and 13-16 are allowable at least by virtue of their dependence from allowable independent Claims.

For at least the above-reasons, it is requested that all the rejections be withdrawn and that this application be allowed in a timely manner.

In the event that there are any questions concerning this amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

Buchanan Ingersoll & Rooney PC.

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By: Kevin Brayton McGoff
Kevin Brayton McGoff
Registration No. 53,297

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620